

C L A I M S

1. A method of establishing a data connection between a first computing device and a second computing device, comprising the steps of establishing a data connection to a second computing device through a third computing device; supplying from the first computing device a query signal to the third computing device; testing the query signal by the third computing device; supplying by the third computing device, when a predetermined query signal is available, the query signal to a fourth computing device; testing the query signal by the fourth computing device; and establishing by the fourth computing device when a predetermined parameter is available through the third computing device a data connection between the first and the second computing device.

2. A method as defined in claim 1; and further comprising before the establishing a data connection, testing by the third and/or the fourth computing device an access readiness of the first computing device, and allowing a data connection when the access readiness is provided.

3. A method as defined in claim 2; and further comprising performing by the fourth computing device a testing of the access readiness; establishing a data connection to the second computing device through the third computing device by the fourth computing device when the access readiness is provided; and allowing by the third computing device the data connection between the fourth computing device and the second computing device without testing an access readiness.

4. A method as defined in claim 1; and further comprising providing in the query signal a target address and a sender address; changing by the fourth computing device the sender address into an own address; and sending by the fourth computing device the query signal through the third computing device as the target address.

5. A method as defined in claim 1; and further comprising supplying by the first computing device an establishment signal with a sender

address of the first computing device through the third computing device; transmitting by the third computing device the establishment signal to the fourth computing device; converting by the fourth computing device the sender address into an own address and supplying the changed establishment signal through the first computing device to the second computing device as a target address; sending by the second computing device an answer signal to the fourth computing device as a target address through the third computing device; providing in the answer signal as a sender signal the address of the second computing device; changing by the fourth computing device the target address of the answer signal into the address of the first computing device; changing by the fourth computing device the sender address into the address of the fourth computing device; and sending by the fourth computing device subsequently the changed answer signal through the third computing device to the first computing device.

6. A method as defined in claim 1; and further comprising evaluating by the fourth computing device the query signal and recognizing an alias name; transmitting by the fourth computing device the query signal

to a fifth computing device; determining by the fifth computing device based on the alias name an address for the second computing device; further transmitting by the fifth computing device the very signal through the third computing device to the address of the second computing device.

7. A method as defined in claim 6; and further comprising supplying by the first computing device an establishment signal to the third computing device; transmitting by the third computing device the establishment signal to the fourth computing device; supplying by the fourth computing device the establishment signal to the fifth computing device; and supplying by the fifth computing device the establishment signal through the third computing device to the second computing device, with exchanging between the first and second computing devices data for establishment a data connection.

8. An arrangement for exchanging data, comprising a first computing device; a second computing device; a third computing device

connected with said second computing device, said third computing device testing a query signal; a fourth computing device with which said third computing device is connected, said third computing device being formed so that when a predetermined query signal is present, the query signal is further supplied to said fourth computing device, said fourth computing device being formed so as to test the query signal, and said fourth computing device when a predetermined parameter is present, establishing through said third computing device a data connection between said first and second computing devices.

9. An arrangement as defined in claim 8, wherein said computing devices are formed so that data are exchanged between said first and second computing devices through said third and fourth computing devices correspondingly, said fourth computing device changing sender and/or target addresses of the exchanged data.

10. An arrangement as defined in claim 8, wherein said fourth computing device provides a testing of an access readiness of said first computing device for establishing a connection to said second computing device, and said fourth computing device establishes a data connection from said first computing device to said second computing device when the access readiness is established.

11. An arrangement as defined in claim 8; and further comprising a fifth computing device with which said fourth computing device is connected, said fifth computing device performing a conversion of an alias name as a target address which is used by said first computing device into an internal address, said fourth computing device establishing a data connection between said first and second computing devices with a use of an internal address of the second computing device.